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**MAR 18 2005**

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Page 1 of 8

**Urgent**

**Confidential**

**Date: March 18, 2005**

**To:**  
Examiner: W. Briney III  
USPTO

**Fax:**  
(703) 872-9306

**Art Unit:**  
2644

**From:**  
Alan Pedersen-Giles

**Fax:**  
703-633-3303

**M/S:**

**Subject: Interface Class Discovery Method & Device**  
**Application No.: 09/593,532; Inventors: Steven DeNies et al.**  
**Filed: June 14, 2000 Docket No. 42.P9786**

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Fax Cover Sheet (1 page)  
Transmittal Form (1 page)  
Response to Election Req. (6 pages)

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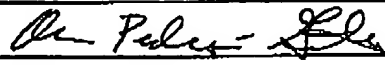
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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	09/593,532	<b>RECEIVED CENTRAL FAX CENTER MAR 18 2005</b>
	Filing Date	June 14, 2000	
	First Named Inventor	Steven DeNies	
	Art Unit	2644	
	Examiner Name	W. Briney III	
Total Number of Pages in This Submission	8	Attorney Docket Number	42.P9788

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Fax cover sheet
Remarks _____		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm Name	Intel Americas	
Signature		
Printed name	Alan Pedersen-Giles	
Date	March 18, 2005	Reg. No. 39,996

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Typed or printed name	Alan Pedersen-Giles	Date	March 18, 2005

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**PATENT  
Docket No. 42.P9786**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of )  
Steven DeNies et al. ) Group Art Unit: 2644  
Application No.: 09/593,532 ) Examiner: W. Briney III  
Filed: June 14, 2000 )  
For: INTERFACE CLASS DISCOVERY METHOD )  
AND DEVICE )

***RESPONSE TO ELECTION/RESTRICTION REQUIREMENT***

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action dated February 18, 2005, the following remarks are respectfully submitted in connection with the above-identified application.

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By: <u>Alan Pedersen-Giles</u>	Date: <u>March 18, 2005</u>
Alan Pedersen-Giles	

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## REMARKS

Claims 1-45 remain pending.

In the Office Action, the Examiner alleged that claims 1-6, 38, and 44 (Group I) and claims 7-36, 39, 40, and 45 (Group II) constitute "patentably distinct species;" and required election among these figures. In the event that Group II was elected, the Examiner required restriction among claims 8-22 (Subgroup A), claims 24 and 25 (Subgroup B), and claims 26-36 (Subgroup C). In the event that Subgroup A was elected, the Examiner required election among claims 8-13 (Sub-subgroup A) and claims 14-22 (Sub-subgroup B).

Applicants provisionally elect claims 1-6, 38, and 44 (Group I), with traverse for the reasons outlined below. In the event the first election requirement is withdrawn, Applicants provisionally elect Subgroup A and Sub-subgroup A, also with traverse.

### First requirement:

Applicants traverse the first election requirement, because Groups I and II are not species. As explained in M.P.E.P. § 806.04(e), "claims to be restricted to different species must recite the mutually exclusive characteristics of such species." In the present application, however, the claims of Group I are generic to, and do not exclude, those of Group II. This will be illustrated with regard to claim 1 (Group I) and claim 7 (Group II) as exemplary claims.

Claim 1 is drafted in the common, open-ended "comprising" style. Thus, nothing in the plain language *excludes* the extra "grouping . . ." and "providing group information . . ." elements of claim 7. Claim 1 certainly does not recite, for example, "not grouping" or "not providing group information." Further, nothing in the "primary interface class information

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includes information about the active conductors” recitation of claim 1 excludes the corresponding “primary interface class information includes information about the pairing of conductors” recitation of claim 7. The “information about the active conductors” (e.g., any information concerning the conductors) in claim 1 is certainly a superset of the “information about the pairing of conductors” in claim 7.

For similar reasons, the last two “determining . . .” and “providing . . .” elements in claim 7 are not excluded by the corresponding “determining . . .” and “providing . . .” elements in claim 1. In summary, Group II is merely a specific case of the more general claims of Group I including the additional concept of grouping, which, though not explicitly present, also is *not excluded* by the claims of Group I. Because Groups I and II are not mutually exclusive and are not species, the election requirement is improper and should be withdrawn, notwithstanding the required election above. Applicants respectfully request that the claims of Groups I and II be examined together.

**Second requirement:**

Applicants traverse the second election requirement, because Subgroups A, B, and C are not patentably distinct. These Subgroups have neither achieved a separate status in the art, nor are separately usable. The particulars of this will be discussed with regard to claims 8 (Subgroup A), 24 (Subgroup B), and 26 (Subgroup C).

Regarding the alleged separate status in the art, Subgroups A, B, and C have been mischaracterized without regard to all of their limitations. Contrary to the somewhat spurious labels on pages 2 and 3 of the Office Action, each of claims 8, 24, and 26 is directed to a method

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of providing an indication signal. Each of claims 8, 24, and 26 includes multiple common limitations, such as analyzing to determine active conductors, grouping the active conductors, providing class information, determining a similarity to the class information, and providing an indication signal based on the similarity. The claims in Subgroups A, B, and C plainly belong in the same class and subclass based on the large amount of common subject matter therein.

The Office Action on pages 2 and 3, by contrast, focuses *solely* (and improperly) on just the differences among Subgroups A, B, and C. The disparate classifications that the Examiner gives these three very similar groups of claims are:

- 1) 324/76.33 ("means to measure the similarity of two or more signals" -- indented under subclass 76.11 -- "MEASURING, TESTING, OR SENSING ELECTRICITY, PER SE").
- 2) 379/24 ("Subject matter including structure for providing a quantitative indication of an electrical characteristic of the line or trunk or the signal thereon.").
- 3) 379/1.04 ("rating the line quality for particular measurements (1) Note. For example, rating the line for baud rates 14.4 k or 28.8 k.").

Whatever, the correct classification of claims 8 (Subgroup A), 24 (Subgroup B), and 26 (Subgroup C), it is likely that at least Subgroup C does not belong in rating line quality for measurements such as baud rates. Nor does Subgroup A appear to particularly belong under measuring and testing electricity "per se." Rather, the separate classifications have been alleged solely for the purposes of attempting to show different classification, and not because Subgroups A, B, and C actually fall into separate classifications. The restriction requirement among Subgroups A, B, and C is improper for at least these reasons.

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Regarding the alleged separate utility on page 3 of the Office Action, this again ignores most of the recitations of claims 8 (Subgroup A), 24 (Subgroup B), and 26 (Subgroup C). While the narrow mis-characterization of "cross-correlation" for Subgroup A may indeed have other utility without the other claim limitations of claim 8, with these other limitations properly included the "method of providing an indication signal" plainly does not have utility in tone detection or echo cancellation as alleged on page 3 of the Office Action. Nor does claim 26 (Subgroup C), which also claims "a method of providing an indication signal" in similar detail as the other subgroups, reasonably have separate utility in "subscriber loop topology determination" as alleged. The restriction requirement among Subgroups A, B, and C is improper for at least the additional reason that the subgroups, reasonably and completely interpreted, do not have separate utility. Applicants respectfully request that the claims of Subgroups A-C be examined together.

**Third requirement:**

Rules 141 and 146 contemplate examination of "a reasonable number of species." Applicants respectfully submit that "a reasonable number" of species is greater than one. Applicants respectfully request that Sub-subgroups A and B be examined together and this nested election requirement be withdrawn.

**Not an unreasonable burden:**

At least independent claims 1, 7, 24, 26, 44, and 45 are similarly structured, and have similar subject matter therein. These independent claims are likely classified in a relatively small number of subclasses in the same class in the art. In summary, Applicants are claiming a single invention in multiple ways, and there is significant subject matter overlap between these

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ways. Applicants have paid the Office upon filing for all 45 of the pending claims, including extra fees for independent claims in excess of 3 and dependent claims in excess of 20. Given the single invention claimed herein and the strong similarity among claims, Applicants do not think it unreasonable to expect examination of all the claims for which the Office was paid.


Accordingly, reconsideration and examination of all of pending claims 1-45 is respectfully requested.

In the event that any outstanding matters remain in this application, Applicants request that the Examiner contact Alan Pedersen-Giles, attorney for Applicants, at the number below to discuss such matters.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0221 and please credit any excess fees to such deposit account.

Respectfully submitted,

Dated: March 18, 2005

  
\_\_\_\_\_  
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